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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/725,026

12/02/2003

Keita Ohshima

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EXAMINER

RILEY, MARCUS T

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

09/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/725,026	Applicant(s) OHSHIMA, KEITA	
	Examiner MARCUS T. RILEY	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 1-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/02/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/27/2007; 06/23/2008; 08/25/2009</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 17, 2009 has been entered.

Response to Amendment

2. This office action is responsive to applicant's remarks received on September 17, 2009. Claims 1-12 remain pending.

Response to Arguments

3. Applicant's arguments with respect to amended claim 1, filed on September 17, 2009 have been fully considered but they are not persuasive.

A: Applicant's Remarks

For Applicant's remarks see "*Applicant Arguments/Remarks Made in an Amendment*" see filed September 17, 2009.

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A: Examiner's Response

Applicant argues that that the cited references do not disclose or suggest the user designation of one of first and second print modes, wherein in the first print mode, a print instruction is given partly in correspondence to analysis of each page of the print document as to whether the page includes color information, and wherein in the second print mode, a print instruction is given partly in correspondence to color attribute information included in a job ticket.

Examiner understands the Applicant's arguments but respectfully disagree. Takahashi '999 either alone or in combination with Takahashi '245 or Hertling '034 discloses, teaches or suggests the Applicant's claimed invention. Takahashi '245 discloses a first and second print mode in response to a user's choice in Fig. 29. Fig. 29 shows where the print mode is determined to see whether the printing job has been designated for manual processing or automatic processing in response to a user choice at Steps S2201 and S2202. Step S2214 & S2209 determines whether or not the printing job consists of color data. See also column 29, line 41 thru column 30, line 26 wherein it explains the different modes and functions of the MFP. Thus, Takahashi '999 either alone or in combination with Takahashi '245 or Hertling '034 discloses, teaches or suggests the Applicant's claimed invention. As a result, Applicant's application is not in condition for allowance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows (see also MPEP 2106):

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 38 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 38 defines a computer-executable process steps embodying functional descriptive material (i.e., a computer program or computer executable code) stored on a computer-readable memory medium. Here, applicant is claiming the steps as opposed to the medium. However, the claim does not define a "computer-readable medium or computer-readable memory" and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. The

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examiner suggests amending the claim(s) to embody the program on “computer-readable medium” or equivalent; assuming the specification does NOT define the computer readable medium as a “signal”, “carrier wave”, or “transmission medium” which are deemed non-statutory (refer to “note” below). Any amendment to the claim should be commensurate with its corresponding disclosure.

Note:

“A transitory, propagating signal ... is not a “process, machine, manufacture, or composition of matter.” Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” (In re Nuijten, 84 USPQ2d 1495 (Fed. Cir. 2007)). Should the full scope of the claim as properly read in light of the disclosure encompass non-statutory subject matter such as a “signal”, the claim as a whole would be non-statutory. Should the applicant’s specification define or exemplify the computer readable medium or memory (or whatever language applicant chooses to recite a computer readable medium equivalent) as statutory tangible products such as a hard drive, ROM, RAM, etc, **as well as** a non-statutory entity such as a “signal”, “carrier wave”, or “transmission medium”, the examiner suggests amending the claim to include the disclosed tangible computer readable storage media, while at the same time excluding the intangible transitory media such as signals, carrier waves, etc.

Merely reciting functional descriptive material as residing on a “tangible” or other medium is not sufficient. If the scope of the claimed medium covers media other than “computer readable” media (e.g., “a tangible media”, a “machine-readable media”, etc.), the claim remains

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non-statutory. The full scope of the claimed media (regardless of what words applicant chooses) should not fall outside that of a computer readable medium.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 6, 17, 20, 21 & 24 - 28** rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (US 6,727,999 B1 hereinafter, Takahashi '999) in combination with Takahashi (US 6,985,245 B1 hereinafter, Takahashi '245).

Regarding claim 29; Takahashi '999 discloses a print managing apparatus comprising (Fig. 1, Server #102, The MFPs 104 and 105 are managed by the server 102. Column 3, lines 5-6 & 28-31):

Takahashi '999 a reception unit configured to receive a print job (Fig. 1, MFP's 104 & 105 receives print jobs. Column 3, lines 9-16) via a communication medium (Fig. 1, Network 101),

Takahashi '999 wherein the print job includes a job ticket (Fig. 21, Job Ticket #21503) and a print document (Fig. 21, Job Ticket No: i.e. #1234 is the number related to the document to be printed after the "OK" button 21508 is pressed as represented in Fig. 22. Column 15, lines 12-20)

Takahashi '999 the job ticket describing print instruction information for the print document (Fig. 22 is a view showing a screen example of a printer driver where the print driver selects an MFP on the network that may receive a print instruction information for the print document. Column 15, lines 39-43);

Takahashi '999 the print instruction information including output layout information and color attribute information (See Figures 15, 16 & 22 wherein #1607 of Figure 16 shows an instruction to print a color

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page. Figure 22 shows the color attribute information for the color document and the output layout information. Fig. 15, #1506, shows where a user may choose and output mode for instructing an MFP to print a document column 8, lines 50-55);

Takahashi '999 does not expressly disclose a layout unit, analysis unit, read unit, designation unit, print control unit and a first and second print mode.

Takahashi '245 a layout unit configured to perform layout of the print document into one or more pages wherein layout is performed based on the output layout information included in the print instruction information described by the job ticket received by the reception unit (See Figure 22 wherein Fig. 22 shows a Job Ticket with output layout information i.e. Copy count is a print instruction to be performed and represents one or more pages. column 20, lines 20-31);

an analysis unit configured to analyze each page of the print document as to whether the page includes color information, wherein analysis is based on the layout performed by the layout unit (See Figure 29 wherein Step S2214 & S2209 determines whether or not the printing job consists of color data. At Step S2203, the printing job is converted into a format that allows each page to be managed. Column 29, line 41 thru column 30, line 26);

a read unit configured to read color attribute information included in the print instruction information described by the job ticket received by the reception unit (See Figure 19, Read Attribute Display Section #1517, The read attribute display section 1517 is comprised of an image size display section 1504 for selecting and designating an image size, a resolution input section 1505, and a color mode setting section 1506. Column 21, lines 54-57. See also column 12, line 50 thru column 13, line 9);

a designation unit configured to designate one of at least first and second print modes in response to a user instruction (See Fig. 29 wherein at Step S2204, the print mode is determined to see whether the printing job has been designated for manual (Manual) processing or automatic (Auto) processing in response to a user choice. Column 29, line 41 thru column 30, line 26);

wherein in the first print mode, a print instruction is given in correspondence to the layout performed by the layout unit and the analysis performed by the analysis unit (See Fig. 29 wherein at

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Step S2202 the process procedure is determined taking the priority of the printing job into consideration. i.e. A print instruction for a print layout is issued by a user and the process of printing is determined. Column 29, line 41 thru column 30, line 26);

and wherein in the second print mode, a print instruction is given in correspondence to the layout performed by the layout unit and the color attribute information read by the read unit (See Fig. 29 wherein at Step S2214 it is determined whether or not the entire printing job consists of color data. Column 29, line 41 thru column 30, line 26);

and a print control unit configured to give a print instruction to a printing apparatus in the one mode designated by the designation unit (See Fig. 29 wherein at Step S2201 a printing job transferred from the client 103 is input to the input job control section 1202 via the first NIC 111 and the input device control section 1201 and is temporarily spooled therein. Column 29, line 41 thru column 30, line 26).

Takahashi '999 and Takahashi '245 are combinable with because they are from same field of endeavor of network printer systems (See Takahashi '245, "Title").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the printer system as taught by Takahashi '999 by adding a layout unit, analysis unit, read unit, designation unit, print control unit and a first and second print mode as taught by Takahashi '245. The motivation for doing so would have been because it is there is a need to produce high-quality document. Therefore, it would have been obvious to combine Takahashi '999 with Takahashi '245 to obtain the invention as specified in claim 29.

Regarding claim 30; Takahashi '999 as modified does not expressly disclose wherein the print managing apparatus is connected to a plurality of printing apparatuses including a monochromatic printing apparatus and a color printing apparatus and wherein the print control unit selects the monochromatic printing apparatus or the color printing apparatus to perform a distribution printing in correspondence to the one mode designated by the designation unit.

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Takahashi '245 discloses wherein the print managing apparatus (Fig. 36, Document Server #102) is connected to a plurality of printing apparatuses (Fig. 36, MFP's 104 & 105) including a monochromatic printing apparatus (Fig. 36, MFP 105) and a color printing apparatus (Fig. 36, MFP 104);

and wherein the print control unit selects the monochromatic printing apparatus or the color printing apparatus to perform a distribution printing in correspondence to the one mode designated by the designation unit. (See Figure 36 where monochromatic printing apparatus or the color printing apparatus may be selected to perform a distribution printing. See also Figure 26 wherein Fig 26 explains how the different modes are selected by the control unit. i.e. At Step S3204 it is determined whether or not the setting mode contained in the command data obtained from the printing requester such as the client 103 is a simple splitting mode, based on the contents of the command data input by the user via the setting item section 1802 on the job ticket screen shown in Fig. 22. Column 27, line 17 thru column 28, line 23).

Takahashi '999 and Takahashi '245 are combinable with because they are from same field of endeavor of network printer systems (See Takahashi '245, "Title").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the printer system as taught by Takahashi '999 by adding monochromatic printing apparatus and a color printing apparatus and wherein the print control unit selects the monochromatic printing apparatus or the color printing apparatus to perform a distribution printing as taught by Takahashi '245. The motivation for doing so would have been because there is a need for a user to have several ways to print a document. Therefore, it would have been obvious to combine Takahashi '999 with Takahashi '245 to obtain the invention as specified in claim 29.

Regarding claim 31; Takahashi '245 discloses wherein the job ticket is reusable, wherein the print instruction information described by the job ticket further includes additional information, and wherein at least one of the output layout information, the color attribute

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information and the additional information is changed to reuse the job ticket. (See Fig's. 20, 21, and 22 where a user may use the cancel buttons 1605, 1711 & 1805 to cancel an operation, reuse the job ticket or change various setting in the job ticket. i.e. A user may select the color attribute of the MFP to change the layout of the document. Column 23, lines 53-67).

Regarding claims 33, 34 & 38; Claims 33, 34 & 38 contain substantially the same subject matter as claim 29. Therefore, claims 33, 34 & 38 are rejected on the same grounds as claim 29. However, claim 38 discloses a computer-executable process steps stored on a computer- readable memory medium for causing a print managing apparatus to execute process. Takahashi '999 at column 18, lines 12-22 discloses a computer readable medium where the medium stores a program and the computer of the system or the apparatus reads and executes the program stored inside the storage media.

Regarding claim 35; Claim 35 contain substantially the same subject matter as claim 30. Therefore, claims 35 is rejected on the same grounds as claim 30.

Regarding claim 36; Claim 36 contain substantially the same subject matter as claim 31. Therefore, claims 36 is rejected on the same grounds as claim 31.

6. **Claims 32 & 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi '999 and Takahashi '245 as applied to claim 29 above, and further in view of Hertling (US 6,874,034 B1 hereinafter, Hertling '034).

Regarding claim 32; Takahashi '999 as modified does not expressly disclose wherein the print instruction information described by the job ticket is described by a markup language.

Hertling '034 discloses wherein the print instruction information described by the job ticket is described by a markup language (Fig. 2, Print Job Ticket #303, i.e. The print job ticket 303 can contains a

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plurality of field of instructions. Each field respectively contains data in a suitable format, such as extensible markup language (XML). Column 9, lines 62 thru column 10, line 7).

Takahashi '999 and Hertling '034 are combinable with because they are from same field of endeavor of network printer systems (*"The present invention is generally related to the field of network printing..."* Hertling '034 at column 1, lines 5-8).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the printer system as taught by Takahashi '999 by adding wherein the print instruction information described by the job ticket is described by a markup language as taught by Hertling '034. The motivation for doing so would have been because it is advantageous to have a suitable language for the server easily read and process information. Therefore, it would have been obvious to combine Takahashi '999 with Hertling '034 to obtain the invention as specified in claim 29.

Regarding claim 37; Claim 37 contain substantially the same subject matter as claim 32. Therefore, claims 37 is rejected on the same grounds as claim 32.

Examiner Notes

7. The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS T. RILEY whose telephone number is (571)270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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